



## ANNEX 3-72 NUCLEAR OPERATIONS

### INTRODUCTION TO NUCLEAR OPERATIONS

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The Air Force's responsibilities in nuclear operations are to organize, train, equip, and sustain forces with the capability to support the national security goal of deterring nuclear attack on the United States, our allies, and partners. The primary purpose of US nuclear operations is to promote stability which results in:

- ★ Deterring adversaries from attacking the United States and its interests with their nuclear arsenals or other weapons of mass destruction (WMD)
- ★ Dissuading adversaries from developing WMD
- ★ Assuring allies and partners of the US' ability and determination to protect them, thus obviating the need to develop or acquire their own nuclear arsenals
- ★ Holding at risk a specific range of targets

Nuclear weapons are as important in 21st century global environment as they ever have been. Our nuclear deterrent is the ultimate protection against a nuclear attack on the United States, and through extended deterrence, it also serves to reassure our distant allies of their security against regional aggression. It also supports our ability to project power by communicating to potential nuclear-armed adversaries that they cannot escalate their way out of failed conventional aggression.

Paradoxically, while the number of nuclear *powers* has increased since the end of the Cold War, the total number of nuclear *weapons* has decreased. Yet, the number of nuclear-capable nations

“Deterrence in the twenty-first century demands credible, flexible nuclear capabilities, linked to comprehensive strategies and matched to the modern strategic environment. That environment will continue to include nation-states with nuclear arsenals that could pose an existential threat to the United States. It will also include: multiple near-peer states with increasingly modernized nuclear capabilities that challenge regional stability; various nuclear aspirant states who resist global non-proliferation norms and whose emerging capabilities threaten U.S. allies; and non-state entities seeking nuclear capabilities. In the future, the flexibility and resilience of our triad of nuclear deterrent forces will continue to play an important role in strategic stability and underpin other tools of statecraft.”

-- *Flight Plan for the Air Force Nuclear Enterprise*

continues to grow. Fewer US nuclear weapons have forced a transformation in Air Force thinking and analysis, especially in a military environment that has grown more complex due to conventional capabilities, missile defense, and the proliferation of anti-access/area denial capabilities. Maintaining strategic stability will be an important challenge in the years ahead as both state- and non-state actors seek to acquire new capabilities or to modernize and recapitalize existing nuclear systems. Each nuclear actor brings their own decision calculus. Some actors may possess a limited ability, if any, to correctly discern US operations, detect changes in US posture, or recognize US intent. Likewise, US decision makers, including [combatant commanders](#), subordinate [joint force commanders](#), and commanders and staffs of Air Force components require understanding of both adversary and ally decision-making processes and behaviors. Nuclear operations in a proliferated, multipolar world is no longer reducible to a bipolar, Cold War paradigm.

This annex is arranged around the following key related topics:

- ★ The section on “[Fundamentals of Nuclear Operations](#)” presents some discussion of the policies regarding nuclear weapons employment
- ★ “[Strategic Effects](#)” presents discussion on the key effects of [deterrence](#), [extended deterrence](#), [assurance](#), [dissuasion](#), and [defeat](#).
- ★ “[Presentation of Nuclear Forces](#)” discusses organization and [command relationships](#) for Air Force nuclear forces.
- ★ “[Nuclear Command, Control, and Communications](#)” presents information on processes and characteristics associated with [command and control](#).
- ★ “[Planning Considerations](#)” presents some high-level considerations on nuclear planning and the post-strike environment.
- ★ “[Nuclear Surety](#)” presents an overview of surety and the subordinate topics of safety, security, and reliability.

Finally, a special note about nuclear operations doctrine. Normally, doctrine provides guidance to commanders for their consideration in campaign design as well as during the course of executing an operation and they adjust their forces to seize opportunities and respond to adversary initiatives. However, since nuclear operations have the potential to achieve effects at the strategic, operational, and tactical levels simultaneously, the conduct of nuclear operations is strictly controlled to ensure a unified effort across all [instruments of national power](#). As such, subordinate nuclear commanders have very little flexibility in adjusting the execution of a nuclear plan. Also, detailed force planning is performed at the joint, not Service, level; hence, there is little Service doctrinal guidance herein on such normally expected topics as [planning considerations at the Service component level](#). Some planning discussion is provided to provide general awareness; Airmen may be called upon to provide weapons system expertise, or regional expertise within a regional planning context.

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